Cat. #: 60B171a

## Description:

CLOCK(Circadian locomoter output cycles protein kaput) is a circadian regulator that acts as a transcription factor. CLOCK-BMAL1 heterodimers bind to an E-box element (3'-CACGTG-5'), thereby activating transcription of PER1, and possibly of other circadian clock proteins. Mutant CLOCK and BMAL1 form hetereodimers that bind DNA, but fail to activate transcription. CLOCK belongs to the basic helix-loop-helix (bHLH) family of transcription factors. Polymorphisms within the encoded protein have been associated with circadian rhythm sleep disorders. A similar protein in mice is a circadian regulator that acts as a transcription factor and forms a heterodimer with aryl hydrocarbon receptor nuclear translocator-like to activate transcription of mouse period 1.

## Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to N-terminal residues of human CLOCK(Circadian locomoter output cycles protein kaput)

## References

Steeves,T.D., et al, Genomics 57 (2), 189-200 (1999) Sato,T.K., et al, Nat. Genet. 38 (3), 312-319 (2006) Moreira,F., et al, Brain Res. Mol. Brain Res. 140 (1-2), 150-154 (2005) Shirogane,T., et al, J. Biol. Chem. 280 (29), 26863-26872 (2005) Pirovano,A., et al, Genet. Med. 7 (6), 455-457 (2005) Miyazaki,K., et al, Biochem. J. 380 (PT 1), 95-103 (2004) Lee,C., et al, Mol. Cell. Biol. 24 (2), 584-594 (2004) Kondratov,R.V., et al, Genes Dev. 17 (15), 1921-1932 (2003) Jin,X., et al, Cell 96 (1), 57-68 (1999) Clone Number: Isotype: Species: human, mouse Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation: Purified by antigen-specific affinity chromatography.

Applications : ELISA Western Blotting (1µg/ml for 2hrs)